

**S1071 Meeting**  
Tuesday, May 20, 2025  
Overton Hotel, Lubbock, Texas

**Present:**

<b>Name</b>	<b>Institution</b>	<b>Email</b>
Tyson Sorensen	Utah State University	<a href="mailto:Tyson.sorensen@usu.edu">Tyson.sorensen@usu.edu</a>
Aaron McKim	Michigan State University	<a href="mailto:amckim@msu.edu">amckim@msu.edu</a>
OP McCubbins	Mississippi State University	<a href="mailto:am4942@msstate.edu">am4942@msstate.edu</a>
Kasee Smith	University of Idaho	<a href="mailto:klsmith@uidaho.edu">klsmith@uidaho.edu</a>
John Ulmer	Kansas State University	<a href="mailto:julmer@ksu.edu">julmer@ksu.edu</a>
Kevin Curry	Penn State University	<a href="mailto:kevincurry@psu.edu">kevincurry@psu.edu</a>
Barry Croom	University of Georgia	<a href="mailto:dbcroom@uga.edu">dbcroom@uga.edu</a>
Catherine DiBenedetto (Zoom)	Clemson University	<a href="mailto:cdibene@clemson.edu">cdibene@clemson.edu</a>
Lesley Oliver (Zoom)	USDA Project Coordinator	<a href="mailto:lesley.oliver@uky.edu">lesley.oliver@uky.edu</a>

**Notes**

Tyson welcomed everyone to the S1071 meeting and called the meeting to Order at 7:10am. Tyson provided an overview of the S1071 project and discussed the 3 objectives.

- **Objective 1:** Curriculum - Facilitate the adoption and evaluate the impact of agricultural STEM curriculum.
- **Objective 2:** Teaching Methods and Techniques- Identify teaching methods, resources (facilities, equipment, materials, etc.), and instructional techniques currently utilized by agriscience teachers during exemplary Agricultural STEM instruction.
- **Objective 3:** Professional Development: Design and evaluate professional development related to Agricultural STEM Education.

Quick participant introductions and sharing of which objectives all have been engaged with.

Discussion of the need for a chair-elect that will take over as chair after 2026 conference and who will help lead the efforts of the S1071 renewal process. OP McCubbins accepted that role as Vice Chair and to Chair starting in May 2026.

Tyson asked for project updates, reports, outputs, and impacts.

**Reports, updates, outputs, and impacts**

**Barry Croom- University of Georgia**

- 4 different studies going on with publications coming soon.
- Experimental design project with middle grades agriscience related to reading strategies and emotive objects/images.
- Year-long ethnographic study, one day per week shadowing a teacher looking at challenges of new agriscience teachers.

**Kasee Smith – University of Idaho**

- Working with state leaders and coordinating a plan for life science credit for agriscience teachers. Ensuring science competencies. Then providing PD surrounding STEM for ag teachers.
- Workforce development in Idaho has a STEM action center which is up for renewal and is looking for an institution to house it. U of I is taking it on, they completed writing the proposal for it. Waiting to hear.

#### **Kevin Curry – Penn State**

- Teaches an integrated science literacy and public policy course at Penn State. He focuses on science literacy on issues related to agricultural and environmental science hot topics. Created a measure to determine how gen ed courses and his course increase ag science literacy.
- Pilot data is being collected. Measuring comparisons between large science course and his integrated science literacy course. Looking at the use of the JMALI instrument (Ag Literacy) as well.
- Hoping to get this measure to secondary schools.

#### **OP McCubbins – Mississippi**

- Has a publication in CTE Journal- related to ag mech and learning labs.
- Farm to Classroom VR project – USDA funded project that develops immersive experiences around Mississippi commodities that can be used in k-6 classrooms and tied to Ag Literacy standards. Has facilitated professional development workshops for K-6 teachers focused on incorporating agricultural content into their classrooms.
- Developed an app with the VR technology. Moving towards integration with HS ag teachers.
- Delivering VR and AI workshops for CTE teachers across Mississippi.
- Tech and Integration- launching observational studies.

#### **John Ulmer – Kansas State University**

- Power structures looking at occupational safety and safety in STEM. Surveys of ag teachers related to safety needs and then delivery of PD to them.

#### **Aaron McKim – Michigan State University**

- Worked with Tyson Sorensen and team to publish a paper related to Objective 2- looking at exemplary STEM educators and the methods, resources, and techniques they use.
- Urban and rural spaces in Michigan—a USDA grant funded projects
- Crosswalking NGSS and agriscience coursework- courses counting for dual science credit.

#### **Catherine DiBenedetto – Clemson University**

- USDA NIFA project—teachers content knowledge in horticulture industry. 10 day experience. Apply knowledge, etc. Creating curriculum. Found teachers struggle with curriculum writing- asking teachers to do too much? Looking at the impacts of these experiences on teachers.

- Hydroponics- lab investigations and development of curriculum. Teachers are piloting that.

#### **Laura Hasselquist – South Dakota State University**

- created a matrix that aligns SD AFNR standards with the Science ones. The teachers have used it to complete "CTE for Science credit" application in the state. Which means they have their Ag classes count for science credit.

#### **Katie Stofer – University of Florida**

- For Obj 3 - We launched the contemporary agriSTEM educator workshops. The workshop featured an online asynchronous component followed by an in-person 1.5 day component showcasing real agriSTEM research, and a final virtual synchronous component where teachers collaboratively re-design lessons with scientists and education researchers. Using the Stages of Concern/Concerns Based Adoption Model to look at implementation. They have 3 more workshops this summer, and would love collaborators interested in helping analyze and or write up this work, as well as folks who might want to learn about the workshop model and how they could adopt it.

#### **Tyson Sorensen – Utah State University**

- Collaboration with Aaron McKim at Michigan State University—Published a paper on Exemplary STEM integration.
- AI integration among agriscience teachers in Utah. Survey research determining the PD needs, perceptions, barriers, and current utilization of AI among them. That publication is in review and will be published soon.
- Published work about SocioScientific issues related to how teachers integrate them into their teaching practices (Objective 2). We have a second journal article also with SSI that is in review.
- Providing PD for ag teachers on how to conduct research so they can better mentor their students with the agriscience fair and agriscience SAE projects.

#### **Lesley Oliver—USDA Project Director Report and Updates**

- This project is set to expire on Sept 30, 2027. The group will need to plan time for discussing the potential for a renewal during next year's annual meeting. A request to write a proposal for the renewal will need to be submitted before September 30, 2026. This requires an updated Issues and Justification section. Then the full proposal will need to be developed and ready for submission and peer review by March 15, 2027. Earlier submission is encouraged.
- NIFA is working on getting RFAs approved for release as quickly as they can. For those that would have been due during the review period, there will likely be a short 30-day turnaround time once the revised RFAs are released. For those with later due dates, they are hoping to get RFAs out so that the due dates can be as close to the original dates (if previously released and not already passed) as possible.
- For the new proposal, ideas with AI integration will be well-received.

**New Business/Discussion:**

Discussion about the need to advertise this committee's work at this conference. Perhaps have a poster at the conference. Also, blast the invitation to more than just this committee but to all AAAE so they know they can participate in this group if they want to. More engagement and participation will be important moving forward.

Discussion about the renewal process and the need to meet up mid-year via Zoom to discuss ideas for the new proposal. One idea to add to the proposal would be related to science credit, science offerings, and science certification among agriculture teachers.

**Meeting Adjourned at 8:05am**